

## ABSTRACT OF THE DISCLOSURE

This invention provides a process for manufacturing a methyl methacrylate polymer comprising the steps of feeding a monomer containing at least 80 wt% of methyl methacrylate and a radical polymerization initiator represented formula (III) to a reactor; polymerizing the material at a polymerization temperature of 110 to 160°C under the conditions satisfying particular equations between an initiator concentration and a polymerization temperature; feeding a reaction mixture taken out from the reactor to a devolatilization step (feeding step); and separating and removing volatiles from the reaction mixture (devolatilization step). A methyl methacrylate polymer having adequately good optical properties and a plastic optical fiber having improved transmission performance can be prepared according to this invention.

